

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference P17676PC00/sko	FOR FURTHER ACTION	
See Form PCT/IPEA/416		
International application No. PCT/NO2004/000154	International filing date (day/month/year) 27.05.2004	Priority date (day/month/year) 28.05.2003
International Patent Classification (IPC) or national classification and IPC E21B33/076		
<p>Applicant FMC KONGSBERG SUBSEA AS et al.</p> <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 1 sheets, as follows:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (Indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application 		
Date of submission of the demand 08.12.2004	Date of completion of this report 15.02.2005	
<p>Name and mailing address of the International Preliminary Examining Authority:</p> <p>European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016</p> <p>CORRECTED VERSION</p>		
<p>Authorized Officer Schouten, A Telephone No. +31 70 340-4088</p> 		

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/NO2004/000154

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
 - International search (under Rules 12.3 and 23.1(b))
 - publication of the international application (under Rule 12.4)
 - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements* of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-6 as originally filed

Claims, Numbers

1-6 filed with telefax on 11.10.2004

Drawings, Sheets

1/2-2/2 as originally filed

a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. The amendments have resulted in the cancellation of:
 - the description, pages
 - the claims, Nos.
 - the drawings, sheets/figs
 - the sequence listing (*specify*):
 - any table(s) related to sequence listing (*specify*):

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages
 the claims, Nos.
 the drawings, sheets/figs
 the sequence listing (*specify*):
 any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/NO2004/000154

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-5
	No:	Claims	6
Inventive step (IS)	Yes:	Claims	1-5
	No:	Claims	6
Industrial applicability (IA)	Yes:	Claims	1-6
	No:	Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/NO2004/000154

Re Item V.

- 1 The following document is referred to in this communication:
D1 : WO 01/25593 A (KONGSBERG OFFSHORE AS ; HOEL KARL WILLIE (NO))
12 April 2001 (2001-04-12)

2 INDEPENDENT CLAIM 1

- 2.1 In light of the documents cited in the international search report, and in light of the subsequent amendments made by the applicant, it is considered as obvious that the invention as claimed in the independent claim 1 meets the criteria mentioned in Article 33(1) PCT, i.e. it appears to be novel, to involve an inventive step and to be industrially applicable for the following reasons:

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses on page 5, line 2-9; page 9, lines 20-21 and in Fig. 1 (the references in parenthesis applying to this document) a:

Pressure containment device comprising a main housing, first longitudinal through bore arranged to receive a wire or cable slidably therethrough, at least two spaced apart transversal through bores intersecting the main bore, each transversal bore carrying a pair of opposing rams (68, 69).

The subject-matter of claim 1 therefore differs from this known pressure containment device in that the first bore comprises sleeves.

The subject-matter of claim 1 is therefore novel (Article 33(2) PCT).

The problem to be solved by the present invention may therefore be regarded as loss of pressure control of the dynamic seal created around the moving wireline, and damaging the rubbers on the rams (see page 5, line 37-42 of the application as originally filed).

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
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PCT/NO2004/000154

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

The mentioned problems are solved by the use of the claimed sleeves in the through bore of the pressure containment device. These sleeves create a tight fit between the moving wireline and the pressure containment device, and at the same time will prevent the rubber on the rams from extruding into the main bore when subjected to pressure when grease is pumped into the main bore.

3 DEPENDENT CLAIMS 2-5

Claims 2-5 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

4 INDEPENDENT CLAIM 6

4.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 6 is not new in the sense of Article 33(2) PCT.

Document D1 discloses on page 5, line 2-9; page 9, lines 20-21 and in Fig. 1 (the references in parenthesis applying to this document) a:

Subsea lubricator comprising a blowout preventer (40), a tool housing (60) and a grease injector assembly (64), the grease injector assembly (64) including a pressure containment device comprising a main housing, a longitudinal through bore arranged to receive a wire or cable slidably therethrough, at least one transversal through bore intersecting the main bore and a pair of rams (68, 69) arranged in the transversal bore.

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CLAIMS:

1. Pressure containment device comprising a main housing, first longitudinal through bore arranged to receive a wire or cable slidably therethrough, at least two spaced apart transversal through bores intersecting the main bore, each transversal bore carrying a pair of opposing rams and where the first bore comprises sleeves, characterized in that the device is including a further bore located between two of the transversal bores, the further bore extending into the main bore, for injection of grease into the main bore.
- 5 2. Device according to claim 1, where the first bore comprises sleeves.
- 10 3. Device according to claim 1, where each ram comprises a front part of an elastic material.
4. Device according to claim 4, where the front part includes a slot.
- 15 5. Device according to claim 1, where each ram comprises a front part with a knife for cutting a cable or wire in the first bore.
6. Subsea lubricator comprising a blowout preventer, a tool housing and a grease injector assembly, the grease injector assembly including a pressure containment device comprising a main housing, a longitudinal through bore arranged to receive a wire or cable slidably therethrough, at least one transversal through bore intersecting the main bore and a pair of rams arranged in the transversal bore.

20

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